

### **Amendments to the Claims**

This listing of the claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. **(Currently Amended)** A method for transparent access authentication of subscribers connected to an authenticating network domain by a General Packet Radio Service GPRS core network or an Universal Mobile Telecommunication System UMTS network, comprising:

receiving a context creation request from a subscriber;

assigning an IP address to the context creation request;

receiving a check-in ID from the subscriber;

receiving a private identification PrivID from the subscriber, the PrivID being correlated with a pre-recorded ID of the subscriber and stored together in a subscriber database;

comparing the check-in ID with the pre-recorded ID;

authenticating the subscriber when the check-in ID matches the pre-recorded ID;

providing a routing module (7) as a standard entry point for all messages and deciding, in the routing module (7), by evaluation of the PrivID, which network node will handle the message, wherein when a protocol other than Session Initiated Protocol SIP is found, the message is routed to a proxy server.

2. **(Previously Presented)** The method according to claim 1, wherein the step of authenticating the subscriber includes, in a Serving GPRS Support Node, using an A3/A8 algorithm based on a SIM card in an end device.

3. **(Previously Presented)** The method according to claim 1, further includes:

using a Gateway GPRS Support Node to receive the context creation request;

querying the context creation request to a Radius server;

using the Radius server to receive the check-in ID; and

storing the IP address and the check-in ID in a session database.

4. **(Previously Presented)** The method according to claim 1, further includes:

using a proxy server comparing the check-in ID with the pre-recorded ID, wherein the subscriber database is an application domain database.

5. **(Previously Presented)** The method according to claim 1, further includes:

using a proxy server to compare a subscriber's IP address in an IP network layer with the assigned IP address for match.

6. **(Previously Presented)** The method according to claim 1, further includes:

using a proxy server to parse an application layer for IP addresses given in headers of registration messages and to compare with the assigned IP address for

match, the IP address given in the headers having already been checked for matches with the assigned IP address.

7. **(Previously Presented)** The method according to claim 1, further comprising in all subsequent messages arriving at the proxy server (5), checking for matches of an IP address in the IP packet overhead field for source address with an IP address in the application layer protocol header fields and verifying the matching pairs against the IP address assigned by the Radius server.

8. **(Cancelled)**

9. **(Currently Amended)** A system of units in a mobile telecommunication network, comprising:

at least a first authentication unit connected to a session database via a first data line; and

a second unit connected to the session database via a second data line;

wherein the second unit assembles data according to the method of claim

1.

10. **(Previously Presented)** The system of units according to claim 9, wherein the first unit comprises a registration server.

11. **(Cancelled).**

12. **(Previously Presented)** The system of units according to claim 9, wherein the second unit comprises a proxy server.

13. **(Previously Presented)** The system of units according to claim 9, wherein the second unit comprises a proxy server connected to a Proxy Call State Control Function via a routing module.

14. **(Previously Presented)** The system of units according to claim 13, wherein the second unit is connected to a subscriber database.

15. **(Previously Presented)** The system of units according to claim 13, wherein a routing module selects messages from one of the proxy server and the Proxy Call State Control Function by evaluating the PrivID.

16. **(Previously Presented)** The method of claim 1, wherein the check-in ID is one of an Mobile Station ISDN Number MSISDN and/or an International Mobile Subscriber Identity IMSI received from the subscriber, and the pre-recorded ID is one of the subscriber's MSISDN or IMSI pre-recorded in a subscriber database.

17. **(Previously Presented)** The system according to claim 12, wherein the proxy server (5) is connected to a subscriber database (4).